

# **STONE MOUNTAIN STATE PARK PARK PROFILE**

## **PARK PURPOSE STATEMENT**

Stone Mountain State Park was established in 1969 when the efforts of local citizens led to the acquisition of 1,463 acres of land. Part of the land was donated, and its value was used as the state's matching fund for grants from the Land and Water Conservation Fund and the Appalachian Regional Commission supporting purchase of the initial land for the park. Since then, Stone Mountain State Park has grown to become one of the largest units in the state parks system. Its combination of highly significant biologic, geologic, scenic, recreational and archaeologic resources makes it one of the premier units of the system.

The park serves North Carolina's residents and visitors by protecting the area's natural resources, protecting wildlife and natural communities within the park, providing opportunities and facilities for viewing and enjoying the major scenic values of the area, providing opportunities for outdoor recreational use and providing interpretive and environmental programs that educate park visitors on the area's plant and animal life, geology, ecology and archeology.

The most the significant geological value is Stone Mountain, which is an exfoliation granitic dome rising 700 feet above the valley floor. It is the largest plutonic monadnock in the state. The light gray, medium-grained biotite granite forming the mountain developed from magma several miles deep in the earth. As erosion removed the overlying granitic rock, the resulting decrease in pressure caused the rock mass to move upward and intrude into older surrounding rocks sometime during the mid-Paleozoic era, 200 million years ago. The outcrops at Wolf Rock and Cedar Rock are similar in structure. The unusual proximity of these features to the Blue Ridge escarpment was a factor in Stone Mountain's designation as a National Natural Landmark in 1974.

The park's topography, combined with substrates ranging from bare rock to fairly well-developed soil, support significant and diverse biologic resources. Natural communities include Acidic Cove Forest, Pine-Oak Heath, Chestnut Oak Forest, Dry-Mesic Oak-Hickory Forest, Low Elevation Rocky Summit and Low Elevation Granitic Dome. The Wolf-Cedar Rock Registered Natural Heritage Area features extensive development of outcrop communities that are excellent illustrations of the successional sequence in the various stages of granite colonization, from lichen to moss to herb to shrub to forest communities. Thirteen rare plant and animal species, including two endangered species, have been reported in or near the park. The park also protects over 200 species of vascular plants.

In addition to the significant scenic values of Stone Mountain and Wolf and Cedar Rocks, the park includes four waterfalls: Stone Mountain Falls, 200 feet in height; Middle Falls, a series of low slides; Lower Falls, approximately 25 feet in height; and Widow's Creek Falls. The northwestern vistas, a panoramic look at the Blue Ridge escarpment, are the most scenic in the park. The most extensive vistas can be best viewed from Wolf Rock. Seventeen miles of cascading trout streams within the park add to the beauty of its exceptional mountain scenery.

The park, which contains more than 13,000 acres, offers the most extensive wilderness backcountry experiences in the state parks system. Stone Mountain is also known for its premier rock-climbing opportunities. Other recreational opportunities within the park include hiking, camping, fishing, nature study, picnicking and horseback riding.

Significant archaeological resources include numerous historic structures such as homesites, farmsteads and graveyards. These resources provide an opportunity to portray the life of mountain settlers from an earlier era.

Stone Mountain was authorized as a state park so that its valuable geological, biological, scenic, recreational and archaeological values could be protected. The Division of Parks and Recreation is charged with preserving these values and providing park experiences that promote pride in and understanding of North Carolina's natural heritage.

### PRIMARY INTERPRETIVE THEME

**Geology of Stone Mountain:** The geologic formation known as Stone Mountain is a plutonic monadnock of light gray, medium-grained biotite granite. The granite was formed from volcanic rock that was intruded into surrounding older rock during the Paleozoic era. The overlying rock has been eroded over millions of years to expose the granite dome.

### STATISTICS

Visitation (1999)	698,960
Operating Budget (FY 98-99)	\$ 451,741
Revenue (FY 98-99)	\$ 86,288

### VISITOR FACILITIES

Tent & trailer camping (37 sites, showers, dumpstation, no hookups)	Back pack camping (6 sites)
One picnic area - 2 shelters	Primitive group camping (5 sites)
8 Hiking trails (12.8 miles total)	Drinking water
Visitor center	River fishing (7 trout streams)
Exhibit hall	Rock climbing
Bridle trail (6 miles)	Historic Hutchinson Homestead

### CONSTRUCTION AND RENOVATION NEEDS

1	The <b>Stone Mountain loop/parking connector trail</b> project requires construction of 200 steps and 400 terrace areas. The loop trail requires 650 steps and 1810 terrace areas.	\$ 611,477
2	The <b>campground expansion</b> project includes demolishing a chicken house, constructing a 2000 ft. access road, 40 campsites, washhouse, amphitheater, 3 creek bridges, extending electric lines underground, well and pump test and sewer system.	1,547,476
3	The <b>group camp development at Brown Town</b> project will construct a washhouse, well septic field, underground electric line, waterline, campsite furniture and parking for 40 cars.	527,249

4	The <b>utilities renovations</b> project will re-drill and re-plumb two wells, extend telephone to the maintenance area, place power line at entrance underground, pump 5 park facility tanks, replace 2 sewer pumps and pump and add inspection risers to 9 sewer systems.	122,731
5	The <b>building demolitions</b> project will provides for demolition and site cleanup of 18 buildings.	81,941
6	The <b>visitor center parking lot revisions</b> project includes landscaping and redesigning the parking lot to add 30 spaces.	251,847
7	The <b>visitor center museum exhibits</b> project includes development of new, state-of-the-art exhibits for the visitor center.	322,596
8	The <b>Stone Mountain horse trail</b> project includes gravel fill, resurfacing problem areas with fine rock screenings and installation of coweeta bars, water bars and ditching every 50 feet.	198,745
9	The <b>Big Sandy trail head</b> project will provide a 1000 feet access road, 50 car parking lot, washhouse and septic field, water and electric extension and interpretive signage.	567,769
10	The <b>maintenance area improvements</b> project will construct a 5-bay vehicle storage building, flammable storage building, lumber shed, warehouse, 2-bay auto shop, extend water and electric lines, 400 feet of access road, clear 1 acre and pave 6000 square yard area.	589,952
11	The <b>park housing renovations</b> project renovates 1 building as a barracks and 6 buildings in accordance with the latest FIIP inventory.	122,823
12	The <b>building renovations</b> project will renovate 7 buildings in accordance with FIIP inspection.	36,533
13	The <b>Louise Chatfield trail</b> project includes gravel fill and resurfacing for all eroded areas and installation of coweeta dips, water bars and/or appropriate ditching every 50 feet.	207,803
<b>TOTAL:</b>		<b>\$ 5,188,942</b>

## REGISTERED NATURAL HERITAGE AREAS

**Stone Mountain Registered Natural Area:** This area encompasses 266 acres and includes the massive exfoliated dome for which the park is named. Designated as a National Natural Landmark in 1974, Stone Mountain rises 600 feet above the surrounding land. This granite monolith has been rounded by weathering and is pocked by weather pits. Pockets of shallow soil support mats of pioneer outcrop plants or small patches of forest dominated by pine, oak-hickory or oak/heath. Cove hardwoods dominate the lower slopes. The summit offers spectacular views of the adjacent Piedmont and Blue Ridge Mountains.

**Wolf-Cedar Rock Registered Natural Area:** This area encompasses 178 acres and centers around Wolf and Cedar Rocks, two outcrops located on a smaller granite monolith that lies across a small valley southwest of Stone Mountain. Eight uncommon species of moss are found in this area, including Keever's bristlemoss, known only from a handful of sites. Cedar Rock supports the most extensive granite outcrop plant communities currently in public ownership in western North Carolina. As a consequence of its smooth surface, much of the vegetation on Cedar and Wolf Rocks occurs as mats, and Cedar Rock supports an excellent successional sequence illustrating the various stages of granite outcrop colonization.

**Garden Creek Registered Natural Area:** This area covers 1,285 acres and supports high quality examples of plant communities typical of the Blue Ridge escarpment, including chestnut Oak Forest, Pine-Oak/Heath, Acidic Cove Forest and Low Elevation Rocky Summit. It spans nearly the entire topographic profile of the Blue Ridge Escarpment edge, running from the western edge of the inner Piedmont to the eastern edge of the Blue Ridge Mountains. Garden Creek and its Cove Hardwood Forests protect outstanding scenic and biological qualities. Numerous seepage slopes and feeder creeks, waterfalls, rock outcrops and steep slopes and ravines support a variety of microhabitats along the stream valley.

#### **POTENTIAL ADDITIONS TO REGISTERED NATURAL HERITAGE AREAS**

**Stone Mountain RNHA:** Consideration should be given to including Stone Mountain Falls and Big Sandy Creek in this RNHA. The presence of a waterfall dropping over 200 feet across the exposed granitic dome and the high quality but fragile communities adjacent to the creek support inclusion.

**Wolf-Cedar Rock RNHA:** All of the dome on which Wolf and Cedar rocks occur should be included in this RNHA. Although this area is tolerating current visitation levels, its fragile plant communities are probably the most unique habitat in the park and they are highly vulnerable to foot traffic. Private mineral rights held by North Carolina Granite Corporation include part of this area.

**Garden Creek RNHA:** This RNHA should be expanded to include the Widow's Creek and Harris Creek watersheds. Both of these streams are rated as superior in water quality and offer many scenic features. Natural communities include Chestnut Oak Forest, Montane Oak-Hickory Forest, Low Elevation Rocky Summit, Pine-Oak/Heath, Acidic Cove Forest and Rich Cove Forest. Special plant populations include ginseng, Piedmont gerardia and Fraser's sedge. Special animal populations include black bear and possibly any of the other species listed for the park.

#### **FUTURE LAND ACQUISITION NEEDS**

Completion of the Stone Mountain State Park master plan will require 3,120 acres. Approximately 150 acres along Sandy Creek are recommended for buffer and boundary line management. Other land acquisition priorities include protection of the park's primary resources, protection of the water quality, protection of the scenic resources, protection of the entrance road and acquisition of the land necessary for master plan development.

Master Plan Total Acreage	16,867 acres
Current Park Acreage	<u>13,747 acres</u>
<b>Acquisition Needs</b>	<b>3,120 acres</b>

### 2000 STAFF POSITIONS

Permanent		Seasonal		Peak Load	
Park Superintendent II	1	Park Attendant	4	Park Attendant	2
Park Ranger III	1	General Utility Worker	3		
Park Ranger II	2	Office Assistant II	2		
Park Ranger I	1				
Maintenance Mechanic IV	1				
Maintenance Mechanic II	1				
Office Assistant III	1				

### PROPOSED STAFF ADDITIONS

Permanent		Seasonal		Peak Load	